International Application No. PCT/EP2004/003703

Attorney Docket: SAMP3001/JEK

## **LIST OF CURRENT CLAIMS**

- 1. (Currently Amended) A method for operating a loom[[,]] having a first drive motor which drives a first <u>loom</u> element, such as a batten, and at least a second drive motor which drives a second <u>loom</u> element, such as a shedding mechanism, characterized in that <u>comprising forming</u> a rotational angle course for a virtual synchronization shaft of the loom is formed; and <u>synchronizing</u> that the elements driven by the drive motors are each synchronized, in at least one predetermined rotational angle position[[,]] with the virtual synchronization shaft.
- 2. (Currently Amended) The method according to claim 1, <u>wherein</u> <del>characterized</del> in that the drive motors (10, 15; 10, 44) are operated as a function of the rotational angle course of the virtual synchronization shaft.
- 3. (Currently Amended) The method according to claim 1, wherein or 2, characterized in that the rotary motion of at least one of the drive motors (10, 15; 10, 44) is regulated; and that wherein the regulation is based on desired values[[,]] which are derived from the rotational angle course of the virtual synchronization shaft.
- 4. (Currently Amended) The method according to <u>claim 1, wherein</u> one of claims 1 through 3, characterized in that the rotary motion of at least one of the drive motors (10, 15; 10, 44) is controlled in accordance with a program.
- 5. (Currently Amended) The method according to <u>claim 1, wherein</u> one of <u>claims</u> 1 through 4, characterized in that the angular positions of the virtual synchronization shaft with which the drive motors (10, 15; 10, 44) are synchronized are adjustable.
- 6. (Currently Amended) A loom having a first drive motor which drives a first loom element, such as a batten, and at least a second drive motor which drives a second loom element, such as a shedding mechanism, characterized in that comprising a control and regulating device (48) is provided, which is arranged to form forms a rotational angle course for a virtual synchronization shaft of the loom and communicate

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to communicate signals related to such rotational angle course to respective control and regulating units (49, 51) of each of the drive motors (10, 15; 10, 44), which are arranged to synchronize each of the elements driven by the drive motors[[,]] in at least one predetermined rotational angle position, with the virtual synchronization shaft on the basis of such signals.

- 7. (Currently Amended) The loom according to claim 6, wherein characterized in that the control and regulating unit (49, 51, 50) of at least one of the drive motors (10, 15; 10, 44) regulates the rotary motion of this said one drive motor in accordance with desired values that are derived from the rotational angle course of the virtual synchronization shaft.
- 8. (Currently Amended) The loom according to claim 6 or 7, wherein characterized in that the control and regulating unit (49, 51) of at least one of the drive motors (10, 15; 10, 44) includes a program controller.
- 9. (Currently Amended) The loom according to <u>claim 6</u>, <u>wherein</u> one of claims 6 through 8, characterized in that the control and regulating units (49, 51) of the drive motors (10, 15; 10, 44) are assigned input devices (53, 54), by means of which data can be input, <u>and</u> on the basis of which data the angular positions to be synchronized with the virtual synchronization shaft are adjustable.
- 10. (Currently Amended) The loom according to <u>claim 6</u>, <u>wherein the first and second loom elements include a shedding mechanism and a batten respectively, and wherein one of claims 6 through 9, characterized in that for the shedding means, a separate drive motor (15, 44) for each is provided, which is independent of a main drive motor (10) that drives the batten (13) the first and second drive motors, are independent of each other, said second drive motor comprising a loom main drive motor.</u>
- 11. (Currently Amended) The loom according to claim 10, wherein characterized in that the first drive motor (15) of the shedding means is mounted on a frame (25, 26)

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of the loom and is connected to the shedding means mechanism via a resilient coupling element (18).

- 12. (Currently Amended) The loom according to claim 10, wherein or 11, characterized in that at least one gear train stage (11, 16, 45) each is provided between the batten (13) and the main drive motor (10) and between the drive elements (14, 37) of the shedding mechanism means and the first their drive motor (15, 44).
- 13. (Currently Amended) The loom according to <u>claim 10</u>, <u>wherein a</u> one of <u>claims</u> 10 through 12, characterized in that the gear train <u>associated with</u> (11) belonging to the main drive motor (10) and the <u>a</u> gear train (16) belonging to <u>associated with</u> the <u>second</u> drive motor (15) of the shedding means are located in a common gearbox (25), which is preferably integrated with a frame of the loom.
- 14. (Currently Amended) The loom according to <u>claim 13</u>, <u>wherein</u> one of <u>claims 10</u> through 12, characterized in that the gear train <u>associated with</u> (11) of the main drive motor (10) and the gear train <u>associated with</u> (16) of the <u>second</u> drive motor (15) of the <u>shedding means</u> are accommodated in chambers (26, 27) separate from one another in the common gearbox.
- 15. (Currently Amended) The loom according to claim 10, wherein 10 or 12, characterized in that the second drive motor (15, 44) of the shedding means is secured to a housing that contains drive elements for the shedding mechanism means.
- 16. (Currently Amended) The loom according to claim 15, wherein characterized in that the second drive motor (15) of the shedding means is secured to a gearbox (33) which in turn is secured to the <u>a</u> housing of the drive elements of the shedding mechanism.
- 17. (Currently Amended) The loom according to claim 15, wherein characterized in that the second drive motor (15) is mounted directly on a the housing of the drive elements of the shedding mechanism means.

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- 18. (Currently Amended) The loom according to <u>claim 6</u>, <u>wherein</u> one of <u>claims 6</u> through 17, characterized in that the main drive motor <u>and a boom component comprising at least one of (10) and/or</u> the batten, (13) as <u>well as</u> the <u>second</u> drive motor, (15, 44) and/or the drive elements, <u>and and/or</u> the shedding <u>mechanism is means are</u> assigned <u>a sensor sensors (23, 24, 28, 31, 50, 52, 56, 57, 59)</u>, which <u>is arranged to</u> detect the angular position of the respective component.
- 19. (Currently Amended) The loom according to <u>claim 1</u>, wherein the first and <u>second loom elements comprise a batten and a shedding mechanism, respectively, wherein said first drive motor is a loom main drive motor and further wherein at least <u>one of one of claims 1 through 9</u>, characterized in that the main drive motor <u>and (10) and/or</u> the <u>second</u> drive motor (15, 44) of the shedding means are <u>is</u> assigned a switchable <u>brakes</u> (22, 29, 30).</u>